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In 2015, United Nations set an agenda called ”Transforming Our World: the 2030 Agenda for Sustainable Development”, this agenda is adopted by more than 150 world leaders. Specifically, in paragraph 51 the 17 Sustainable Development goals are presented with their correlated 169targets. Civil Engineering is an essential contributor for the achievement and delivery of policies for Sustainable Development. Sustainable Development can be studied by examining various categories as: environmentally friendly design, procurement, construction methods, and management procedures (Opoku, 2016).

At the moment, building and construction industries are the larger consumers regarding natural resources (land use and material extraction), and score 30-40% of global primary energy and greenhouse emissions (Kallaos, 2010). Built environment is greatly connected with the progress of the society, therefore the sustainable built structures is an outcome of meaningful development and reliable engineering. Vital element for the achievement and implementation of the UN SDG‘s is to acquire and communicate the relevant knowledge. Concerning built structures, the life cycle categories from where the largest effects originated from are: construction, use, maintenance, and decommissioning of buildings and infrastructure (Kallaos, 2010).

.According to this, the areas in which the environmental impacts should reduce are: energy, carbon, waste and water. This presentation will provide an overview on how to quantitative approach the UN SDG‘s in Civil Engineering, and more specific from an LCA point of view.

1- Illustration of how the built environment can support the UN SDGs. (World Green Building Council, 2017)